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EXAMINER

BORSETTI, GREG

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/701,494	Applicant(s) LEE ET AL.	
	Examiner GREG BORSETTI	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1-4, 7-9 are pending.
2. Claims 1-2, 4, and 7 have been amended.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/6/2011 has been entered.

Response to Arguments

4. Applicant's arguments with respect to claims 1-4, 7-9 have been considered but are moot in view of the new ground(s) of rejection. See the new grounds of rejection below.
5. The Examiner notes that the amendment "so that actions by the talker and listener cannot intervene in between the current state and the next state" (noted by application as allegedly found in ¶ 0051 of the specification) is not expressly or inherently found in that section. ¶ 0051 of the specification reads "As mentioned above, since the interpretation scenario is configured in the format of <current state, event,

action>, the action necessary for the next stage can be immediately performed regardless of what events are generated from the talker 100 and the listener 300 so that smooth communication between the talker 100 and the listener 300 who use different languages can be made.” The Examiner notes that the amended subject matter, while not expressly written in the specification, is not considered to be new matter because one having ordinary skill in the art at the time the invention was made would understand that it is inherent given the structure shown in Fig. 6 of Applicant’s instant specification.

Claim Objections

6. Claim 4 is objected to because of the following informalities: Claim 4’s amendments did not include “recognizing” which should be changed to “recognize”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, and 7- 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai et al. (US Patent # 6636587) in view of JTAPI (NPL Document “The Java Telephony API” hereinafter JTAPI).

As per claim 1, Nagai discloses a third-party call control type simultaneous interpretation system, comprising:

a CTI (Computer-Telephony Integration) board to establish a traffic channel between a talker and a listener (Nagai, column 6 lines 52-57);

a CTI control module to generate an event in response to a button signal input through the CTI board to control the CTI board as a job unit comprising CTI control functions to perform a basic telephone action (Nagai, column 18 line 67 – column 2 line 15, *the PBX/ACD control program detects a transmission from the outside, for example from a telephone, and informs the system execution management program of the detection of the transmission message (generates an event). The system then starts the telephony agent program in order to send the transmission to the receiver (basic telephone action). Since the transmission originated from a telephone, it is inherent that the event was generated in response to a button signal input through the CTI board*);

an interpretation module to recognize a voice of the talker/listener input through the CTI board and translate the voice into a predetermined language (Nagai, column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming voice with ASR processing board, then uses a program stored in memory to perform language translation*); and

a main control module to control an action of the CTI control module in accordance with a predetermined interpretation scenario that includes a current state, a current state conversion action selected according to the event generated in the CTI

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module and a basic telephone action to be executed at a next state (Nagai, column 18 line 67 – column 21 line 65, *the system execution management program (main control module) controls the telephony agent program and the PBX/ACD program (part of the CTI control module), where the telephony agent program routes a transmission, for example to the receiver's telephone (basic telephone action), that satisfies contact conditions (predetermined interpretation scenario) based on the coincident contact adjustment state (current state and current state conversion action) and the PBC/ACD program detection and notification of receipt of a transmission message),*

wherein the main control module includes an interpretation scenario management section to select the current state conversion action and the basic telephone action for the next state in accordance with the predetermined interpretation scenario when the event is generated in the CTI module, and a state conversion section to convert the current state into the next state in response to the current state conversion action selected by the interpretation scenario management section (Nagai, column 18 line 67 – column 21 line 65, *the system execution management program uses a contact manager (interpretation scenario management section) which includes user contact information indicating contact conditions (predetermined interpretation scenario), such as the sending and receiving devices. Once the PBX/ACD program provides a notification of a received transmission (event), the system execution management program uses the contact manager and the telephony agent program to determine the contact conditions and check for needed media conversions, depending*

on the sending and receiving devices and the type of message received, before forwarding the transmission to the receiver (telephone action for the next state),

Nagai fails to teach wherein the state conversion section converts the current state directly into the next state in response to the current state conversion action selected; wherein, since the CTI control functions are configured as a job unit, basic telephone actions comprising dialing, answering and hanging up are made in accordance with only one job unit without individually and repeatedly calling the CTI control functions so that actions by the talker and listener cannot intervene in between the current state and the next state.

However, JTAPI teaches wherein the state conversion section converts the current state directly into the next state in response to the current state conversion action selected (JTAPI, Connection Object States, bottom of Page 12- page 13, the call types always correspond to connection objects that reflect the relationship between a call and an address. These states reflect the current state of the call and switch based on changes in the Connection object.);

wherein, since the CTI control functions are configured as a job unit, basic telephone actions comprising dialing, answering and hanging up are made in accordance with only one job unit without individually and repeatedly calling the CTI control functions so that actions by the talker and listener cannot intervene in between the current state and the next state (JTAPI, page 12, dialing (Call.connect), answering (TerminalConnection.answer), and hanging up (connection.disconnect) are used as

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functions in the API as opposed to the explicit lower level function calls as shown on pages 18-19 (configured as a job unit through a high level API function). Additionally see Page 13 where there are no interactions between states, so actions between a talker and listener cannot intervene between a current state and the next state.)

JTAPI and Nagai are analogous art because both pertain to computer telephony integration. Therefore it would have been obvious to someone of ordinary skill in the art at the time the invention was made to modify the CTI controls (as taught by Nagai) with the application programming interface (as taught by JTAPI) to provide object oriented for CTI applications to simplify the coding for developers by having a portable coding alternative (JTAPI, Page 4, ¶ 2).

As per claim 2, the combination of Nagai and JTAPI teaches the system as claimed in claim 1, wherein the CTI control module further comprises an event handler to generate the event in response to the button signal input through the CTI board. (Nagai, column 18 line 63 – column 19 line 65 and column 17 lines 19-21, *the system send notification of a received transmission (event) and routes the transmission from a source to a receiver, through the PBX or telephone switchboard, using various contact means, including a telephone. Since a user indicates the number to be called, i.e. the receiver, by pushing buttons on the telephone, it is inherent that a button is pushed*);

As per claim 3, the combination of Nagai and JTAPI teaches the system as claimed in claim 2, and further teaches wherein the basic telephone action includes one

or more of phone dialing (Nagai, column 18 lines 14-15), phone answering, phone disconnection or hanging up, button pressing (column 18 lines 39-41), button reading, tone detection, voice forward, voice store, speaking and listening.

As per claim 4, the combination of Nagai and JTAPI teaches the system as claimed in claim 1, wherein the interpretation module comprises a speech recognition section to recognize the voice input through the CTI board and converting the recognized voice into text (Nagai, column 8 lines 62-67 and Figure 3 item 308);

a translation section to translate the text into the predetermined language (Nagai, column 9 lines 14-15);

and a speech synthesis section to synthesize a speech from the text recognized through the speech recognition section or the text translated through the translation section and outputting the synthesized speech (Nagai, column 8 lines 59-61).

As per claim 7, Nagai discloses a third-party call control type simultaneous interpretation method, comprising the steps of:

a telephone connection step of establishing a traffic channel between a talker and a listener when the talker connects with a simultaneous interpretation system (Nagai, column 6 lines 52-57);

an automatic interpretation step of, when an event is generated in a CTI control module in response to a button signal input by the talker or listener through a CTI board to control the CTI board as a job unit comprising CTI control functions for performing a

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basic telephone function, translating an input voice of the talker or listener into a predetermined language in response to the generated event based on a predetermined interpretation scenario (Nagai, column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming transmission message, detected by the PBX/ACD program, and recognizes a voice using the ASR processing board, then uses a program stored in memory to perform language translation (an event), where the transmission message, including the recognized voice, is processed according to contact conditions (predetermined interpretation scenario)*); and

an interpretation transmission step of controlling the CTI board in accordance with the interpretation scenario and transmitting the translated voice to the other party in accordance with the interpretation scenario, wherein the predetermined interpretation scenario includes a current state, a current state conversion action selected according to the event generated in the CTI module and a basic telephone action to be executed at a next state (Nagai, column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming voice with the ASR processing board then uses a program stored in memory to perform language translation; the translation and transmission message type is determined based on the requested media type at the receiver which was previously registered and stored in memory, and the transmission message detected by the PBX/ACD program (predetermined interpretation scenario) Further see Fig. 10 where depending on the current state (contact adjustment state and subsequent action) the system performs the requisite action.*),

wherein the transmission step includes selecting the current state conversion action and the basic telephone action for the next state in accordance with the predetermined interpretation scenario when the event is generated in the CTI module, and converting the current state into the net state in response to the selected current state conversion (Nagai, column 18 line 67 – column 21 line 65, *the system execution management program uses a contact manager (interpretation scenario management section) which includes user contact information indicating contact conditions (predetermined interpretation scenario), such as the sending and receiving devices. The contact manager is used by the system execution management program and the telephony agent program to determine the contact conditions and check for needed media conversions, depending on the sending and receiving devices and the type of message sent, before forwarding the transmission to the receiver (telephone action for the next state),*

Nagai fails to teach converting the current directly into the next state in response to the selected current state conversion action; wherein, since the CTI control functions are configured as a job unit, basic telephone actions comprising dialing, answering and hanging up are made in accordance with only one job unit without individually and repeatedly calling the CTI control functions so that actions by the talker and listener cannot intervene in between the current state and the next state.

However, JTAPI teaches converting the current directly into the next state in response to the selected current state conversion action (JTAPI, Connection Object

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States, bottom of Page 12- page 13, the call types always correspond to connection objects that reflect the relationship between a call and an address. These states reflect the current state of the call and switch based on changes in the Connection object.);

wherein, since the CTI control functions are configured as a job unit, basic telephone actions comprising dialing, answering and hanging up are made in accordance with only one job unit without individually and repeatedly calling the CTI control functions so that actions by the talker and listener cannot intervene in between the current state and the next state (JTAPI, page 12, dialing (Call.connect), answering (TerminalConnection.answer), and hanging up (connection.disconnect) are used as functions in the API as opposed to the explicit lower level function calls as shown on pages 18-19 (configured as a job unit through a high level API function). Additionally see Page 13 where there are no interactions between states, so actions between a talker and listener cannot intervene between a current state and the next state.)

JTAPI and Nagai are analogous art because both pertain to computer telephony integration. Therefore it would have been obvious to someone of ordinary skill in the art at the time the invention was made to modify the CTI controls (as taught by Nagai) with the application programming interface (as taught by JTAPI) to provide object oriented for CTI applications to simplify the coding for developers by having a portable coding alternative (JTAPI, Page 4, ¶ 2).

As per claim 8, claim 7 is incorporated and the combination of Nagai and JTAPI teaches wherein the automatic interpretation step comprises:

recording the input voice of the talker or listener in response to the event based on the predetermined interpretation scenario when the event is generated in the CTI control module in response to the button signal input by the talker or listener through the CTI board (Nagai, column 19 lines 19-25 teaches that information is saved into work memory. The incoming voice stream necessarily needs to be stored to be translated, where the translation process is in response to the event based on the predetermined interpretation scenario (user added someone to their contact list (Fig. 5) defined by the contact conditions and confirmed by clicking mouse button (Nagai, column 12, lines 30-43)). The interaction proceeds through the CTI board (Nagai, column 6 lines 52-57).); and

recognizing the voice and translating the recognized voice into the predetermined language through an interpretation module in accordance with the predetermined interpretation scenario (Nagai, column 8 lines 62-67 and column 9 lines 14-15, *the system recognizes an incoming voice with ASR processing board then uses a program stored in memory to perform language translation, the translation determined based on the requested media type at the receiver which was previously registered and stored in memory*).

As per claim 9, claim 7 is incorporated and the combination of Nagai and JTAPI teaches wherein the translating step comprises: recognizing the recorded voice and converting the recognized voice into text (Nagai, column 8 lines 62-67); translating the

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text into the predetermined language (Nagai, column 9 lines 14-15); and synthesizing a speech from the translated text (Nagai, column 8 lines 59-61).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to PTO-892, Notice of References Cited for a listing of analogous art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885, (FAX: 571-270-4885). The examiner can normally be reached on Monday - Friday (8am - 5pm Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/
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